

Remarks

Rejections Under 35 USC §112

I. Claims 34-41 and 43-46 have been rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

II. Claims 31-41 and 43-46 have been rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification in such a way to enable one skilled in the art at the time of the invention to make or use the invention. It is noted that claims 31-33 were canceled by the Preliminary Amendment dated July 10, 2000.

III. Claims 31-41 and 43-46 have been rejected under 35 USC §112, second paragraph, as being indefinite. It is noted that claims 31-33 were canceled by the Preliminary Amendment dated July 10, 2000.

Rejections Under 35 USC §102(b)

Claims 34-41 and 43-46 have been rejected under 35 USC §102(b) as being anticipated by Kattner et al., Enochs, Jamison et al., Greub et al., Littlebury et al., Malhi et al., Elder et al. '850 or Item 32636 of the Research Disclosure No. 326.

Rejections Under 35 USC §102(e)

Claims 34-41 and 43-46 have been rejected under 35 USC §102(e) as being anticipated by Item 32636 of the Research Disclosure No. 326.

Argument

Rejected claims 34-41 and 43-46, and withdrawn claim 42 were canceled by the Amendment dated February 18, 2003, which was submitted with a "Request For Continued Examination (RCE) Under 37 CFR 1.114". The Amendment dated February 18, 2003 was apparently received by the Patent Office, as the Attorney For Applicant received the return receipt postcard submitted with the Amendment date stamped by the PTO on February 21, 2003. In addition, Deposit Account Number 071857 for the Attorney for Applicant indicates deduction of the fee set forth in 37 CFR 1.17(e) for the RCE.

However, the Amendment dated February 18, 2003 is not mentioned in the final Office Action dated March 7, 2003. It appears that Amendment dated February 18, 2003 was not entered due to an error in the final rejections contained in the Office Action dated October 17, 2002.

This Preliminary Amendment contains the same amendments to the drawings, specification and claims, contained in the Amendment dated February 18, 2003. However, this Preliminary Amendment is being submitted with a Continued Prosecution Application (CPA) under 37 CFR 1.53(d), rather than with a RCE, as with the Amendment dated February 18, 2003.

By this Preliminary Amendment rejected claims 34-41 and 43-46, and withdrawn claim 42, have been canceled. Claims 55-75 have been added, and are directed to a "method for burn-in testing a semiconductor die". Even though these claims are not directed to the previously elected species, it is requested that the previous election not carry forward to the CPA.

As support for this request, MPEP 819 states: "Where a continued prosecution application (CPA) filed under 37 CFR 1.53(d), is a continuation of its parent application and not a divisional, . . . an express election made in the

prior (parent) application in reply to a restriction requirement carries over to the CPA or FWC application unless otherwise indicated by applicant." (underlines added)

In the specification, the title has been changed to be more descriptive of the added claims. In addition, the "Cross Reference To Related Applications" has been amended to refer to a related case, Patent No. 6,091,251. The related case is a division of parent case, Patent No. 5,302,891, and also has claims directed to a "method for testing a semiconductor die". In addition, the "Cross Reference To Related Applications" has been amended to refer to related cases, Patent Nos. 5,408,190 and 5,440,240, which are continuations-in-part of abandoned parent case, serial no. 709,858.

In the drawings, permission is requested to add a labeled block in Figure 2 for a burn-in oven. A replacement Figure 2 which incorporates the changes is attached to this Preliminary Amendment. As the term burn-in oven is used in the added claims, the amendment to the drawings is necessary to show all of the claim elements in the drawings. Antecedent basis for the "burn-in oven" element is contained on page 5, line 31, and on page 12, line 8, of the specification.

In addition, support for amending the drawings with the additional element is contained in 37 CFR 1.83(a) which states:

§1.83 Content of drawing

(a) The drawing must show every feature of the invention specified in the claims. However, conventional features disclosed in the description and the claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the form of a graphical drawing symbol (e.g., a labeled rectangular box).

(c) Where the drawings do not comply with the requirements of paragraphs (a) and (b) of this section, the examiner shall require such additional illustration within a time period of not less than two months from the date of sending of a notice thereof. Such corrections are subject to the requirements of §1.81(d).

ADDED CLAIMS

With respect to the added claims, independent claim 55 is directed to a method for burn-in testing a die 21 (Figure 2), in which a test fixture 11 (Figure 2) having an external lead 33 (Figure 2) for establishing electrical contact between the die and a burn-in oven (antecedent basis on page 5, lines 31-32 of the specification) is provided. Independent claim 55 also recites the step of providing a plastic film 43 (Figure 2) having a bump 47 (Figure 2) for electrically contacting a pad 27 (Figure 1) on the die. Independent claim 55 also recites the steps of "placing the die in the test fixture", "placing the bump in electrical contact with the pad" and "placing the external lead in electrical contact with the burn-in oven".

Independent claim 61 is similar to claim 55, but recites plural leads and bumps, and recites the step of "biasing the bumps into electrical contact with the pads using a compressible member 53 (Figure 2)".

Independent claim 67 is similar to claim 55, but recites a "second bump 48 (Figure 2)" which establishes electrical communication between the "first bump 47 (Figure 2)" and the "external lead 33 (Figure 2)".

Independent claim 72 is similar to claim 55, but recites the step of "bonding the bump 47 (Figure 2) to the pad 27 (Figure 1)". Antecedent basis for this step is contained on page 9, lines 22-24 of the specification.

Conclusion

In view of the amendments, favorable consideration and allowance of claims 55-75 is requested. An IDS is being filed concurrently with this Preliminary Amendment. The same IDS was submitted with the Amendment dated February 18, 2003, but was apparently not considered by the Examiner. Should any issues remain, the Examiner is asked to contact the undersigned by telephone.

DATED this 6th of June 2003.

Respectfully submitted:



STEPHEN A. GRATTON
Registration No. 28,418
Attorney for Applicants


2764 S. Braun Way
Lakewood, CO 80228
Telephone: (303) 989-6353
FAX (303) 989-6538

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label Number EU 979023889 US
Date of Deposit: June 6, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Mail Stop CPA, Commissioner For Patents, PO Box 1450, Alexandria, VA 22313-1450.

June 6, 2003
Date of Signature


Stephen A. Gratton, Attorney for Applicants